"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, T.

YUGO.

Distribution of metals in bauxitic oölites. H. Ivković, S. Težak, and T. Marin. *Bull. intern. acad. yougoslave sci. et beaux-arts*, [N.S.] *Livre* 12, *Classe sci. math., phys. et tech., Livre* 4, 89-92(1954)(in English).—See *C.A.* 48, 6025g. N. Plavšić

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARTIN, T.

(4)

The distribution of metals in bauxitic oölites. H. Ivekovič, S. Težak, and T. Marin (Zagreb Univ., Yugoslavia). *Radovi Jugoslav. Akad. Znanosti i Umjetnosti* 296, 161–8 (1953).—Chem. analyses of 7 fractions of oölites obtained from a sample of bauxite from Drniš (Yugoslavia) indicate that linear relationships exist between their Fe_2O_3 and V_2O_5 or Cr_2O_3 contents. For calcg. the approx. V_2O_5 and Cr_2O_3 contents of a bauxite one can use the formulas: % V_2O_5 = % Fe_2O_3 × 4.8 × 10^{-4} and % Cr_2O_3 = % Fe_2O_3 × 5.1 × 10^{-4}. There are no relationships with regard to the MnO, TiO, Al_2O_3, and SiO_2 contents. N. Plavšić

11/15/54 CM

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MILCU, M., Academician St.; FELDMAN, D.; DAMIAN, E.; MARIN, T.; CISMARESCU, L.

Urinary elimination of 17-ketosteroids in patients of rheumatism treated with iodized mineral water and thyroid extract. Probl. reumat., Bucur. no.5:37-39 1958.

(17-KETOSTEROIDS, in urine
in rheum., eff. of thyroid extract & iodized mineral water baths)
(THYROID GLAND, extract
eff. on 17-ketosteroids in urine in patients of rheum.)
(BALNEOLOGY, in various dis.
rheum., iodized mineral water, eff. on 17-ketosteroids in urine)
(RHEUMATISM, urine in
17-ketosteroids, eff. of thyroid extract & iodized mineral water baths)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

PAVLOVIC, P.; MARIN, S.; MATEJCIC, M.

Palliative treatment of bronchial carcinoma. Tuberkuloza 17 no.1/2: 173-176 Ja-Ap'65.

1. Iz odjela za radioterapiju, opce bolnice Sobol, Rijeka; iz bolnice za tuberkulozu pluca, Ioici; iz rendgen zavoda, opce bolnice Kucic, Rijeka.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, S.N.; ROTSHIL'D, Ye.V.

Ecological and epizootiological significance of the noctrunal activity of the greater gerbil (Rhombomys opimus Licht.). Zool. zhur. 40 no. 2:264-268 F '61. (MIRA 14:2)

1. Aral Sea Anti-Plague Station.
(Aral Kara-Kum--Gerbils as carriers of disease)
(Kyzyl Kum--Gerbils as carriers of disease)
(Animals, Habits and behavior of)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, S.N.; ROTSHIL'D, Ye.V.

Nocturnal activities of the greater gerbil. Biul. MOIP. Otd. biol. 65 no.5:140 S-O '60. (MIRA 13:12)
(ARAL SEA REGION--GERBILS)
(KYZYL KUM--GERBILS)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, S. N.

"The mobility of the large sand rats as a factor in the retention of the plague infection in the focus." p. 250

Desyatoye Soveshchaniye po parazitologicheskim problemam i prirodnoochagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959 Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

Aralamorskaya Antiplague Station

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, S.N.

Colony of American beavers (Castor canadensis Kuhl.) in the U.S.S.R. [with English summary in insert]. Zool.zhur.35 no.7:1064-1071 Jl '56. (MLRA 9:9)

1.Institut zoologii AN USSR.
(Beavers)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, S.D.

Treating traumatic fistulas of the cervical section of the spine which affect the cerebrospinal fluid. Vop.neirokhir. 21 no.1:52-53 Ja-F '57. (MIRA 10:3)

1. Klinika gospital'noy khirurgii Krasnoyarskogo meditsinskogo instituta.
(FISTULA) (SPINE--WOUNDS AND INJURIES)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, S. D., DOCENT

Tumors

Glomus tumor under the nail. Klin.med. 30 No. 6 1952.

Monthly List of Russian Accessions, Library of Congress October 1952 UNCLASSIFIED.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, S. D.

Fingers - Tumors

Glomus tumor. Khirurgiia No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

Bulgaria/Military B-555

MARIN, St., Podpolkovnik/Med Serv; author of an article entitled "Concerning Incidents With Electric Current During Physio-Therapeutic Procedures in Medical Practice." (Voenno Meditsinsko Delo, Sofia, May 61, pp 80-82)

24
(1)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARKOV, M., prof.; BERCHEV, Kr.; MARIN, St.

On mercury poisoning in therapeutic practice (A case of mercury poisoning caused by lavage of the urinary bladder). Khirurgiia, Sofia 13 no.11:965-969 '60.

1. Vissh meditsinski institut, Sofia. Katedra po sudebna meditsina Zav. katedrata: prof. M.Markov.
(MERCURY toxicol)
(BLADDER)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, S.; FRANCISKOVIC, V.; KUIS, M.; MATEJCIC, M.

Clinical and surgical evaluation of the operability of bronchial carcinoma. Tuberkuloza 17 no. 1/2:155-161 Ja-Ap'65.

1. Bolnica za tuberkulozu pluca, Icici; Kirurska klinika bolnice dr. Kucic, Rijeka; Grudno odeljenje opce bolnice, Pula; Rendgen zavod bolnice dr. Kucic, Rijeka.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARTIN, Nikodim, dr. (Je'-1)

Current aspects of chronic respiratory diseases. Med. glas. 18 no.9:245-252 S '64

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, S., dr.; FRANCISKOVIC, V., dr.; MATEJCIC, M., dr.

Role of the general practitioner in the early detection of bronchial carcinoma. Med.Glas.17 no.11/12:433-438 N-D '63.

1. Bolnica za tuberkulozu pluca Icici, Kirursko i Rendgensko odjeljenje Opce bolnice "Dr Z. Kucic", Rijeka.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN,S.; MESIC,J.

Bronchographic studies after pulmonary resection. Tuberkuloza 16 no.3:289-298 My-Ag '64

1. Bolnica za tuberkulozu pluca, Icici (Ravnatelj: prim. dr. C. Ostoic); Institut za tuberkulozu, Golnik (Direktor: doc. dr. B. Fortic).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Slobodan

A technic for taking arterial blood with Cournand's needle.
Tuberkuloza 15 no.3:481-486 Jl-D'63.

1. Bolnica za tbc pluca, Icici. Ravnatelj: prim.dr. C.Ostoic.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Slobodan

Isoniazid alone therapy of post-tuberculosis pulmonary syndromes. Tuberkuloza 15 no.2:225-235 Ap-Je '63.

1. Bolnica za tbc pluca, Icici - Ravnatelj: prim. dr Cvjetko Ostoic.

(TUBERCULOSIS, PULMONARY) (ISONIAZID)
(THORACIC RADIOGRAPHY)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Slobodan, dr.

Tuberculosis at a turning point. Med. glas. 16 no.4:152-157 Ap '62.

1. Bolnica za tuberkulozu pluca Icici (Ravnatelj: prim. dr. C. Ostoic).

(TUBERCULOSIS)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Slobodan

Fenestration of the trachea and division and ligation of the bronchus in a patient with respiratory insufficiency. Tuberkuloza no.1:54-58 '62.

(RESPIRATORY INSUFFICIENCY) (TRACHEOSTOMY)
(BRONCHI)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Slobodan

Changing picture of pulmonary tuberculosis under the influence of chemotherapy. Tuberkuloza no.1:20-25 '62.

1. Bolnica za tbc pluca Icici (Ravnatelj:: prim. dr. C. Ostojic).
(ANTITUBERCULAR AGENTS)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

YUGOSLAVIA/General Problems of Pathology. Neoplasms. U

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37285.

Author : Marin, S.
Inst :
Title : Cancer of the Bronchis and Pulmonary Tuberculosis.

Orig Pub: Tuberkuloza, 1956, 8, No 6, 385-390.

Abstract: No abstract.

Card : 1/1

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Slobodan, Dr.

Partial relaxation of the diaphragm or pseudotumor; with report of a case. Tuberkuloza, Beogr. 7 no.2-3:147-149 Mar-June 55.

1. Bolnica za tuberkulozu pluca--Icici (ravnatelj: prim. dr. Cvetko Ostoic).
(DIAPHRAGM,
relaxation, case report)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, M.; DUMA, N.

Gluing by high-frequency currents in the wood industry. Ind lemnului 14 no.3:81-85 Mr '63.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, R.

That we may improve the quality of barrel production. p. 387.

INDUSTRIA LEMNULUI. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Rominia si Ministerul Industriei Lemnului) Bucuresti, Rumania. Vol. 10, no. 8, Oct., 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb., 1960

UNCL.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAVIN, R.

Protection of labor, a constant preoccupation; marginal notes upon the exchanges of experiences in labor protection the the Bacau Trust for Wood Industrialization. p.433.

INDUSTRIA LEMNULUI. (Asociatia Stiintifica a Iginerilor si Tehnienilor din Romania si Ministerul Industriei Lemnului, Bucuresti, Rumania Vol. 8, no.11, Nov 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2 Feb. 1960

Uncl.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, R

Circles of the Scientific Association of Engineers and Technicians helping production; marginal notes on the report session of the section for syviculture wood industry in the Bacau regional branch of the aforesaid association. p. 399

INDUSTRIA LEMNULUI. (A sociatia Stiintifica a Iginerilor si Tehnicienilor din Rominia si Ministerul Industriei Lemnului. Bucuresti, Rumania Vol 8, no. 10, Oct 19[illegible]9

Monthly List of East European Accessions (EEAI) LC, Vol 9, no.2, Feb. 1960

Uncl.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, M.

That we may inprove the quality of barrel production. p. 387.

INDUSTRIA LEMNULUI. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Rominia si Ministerul Industriei Lemnului) Bucuresti, Rumania.
Vol. 8, No. 10, Oct. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9 No 2, Feb. 1960

Uncl.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, R.

TECHNOLOGY

Periodicals: INDUSTRIA LEMNULUI. Vol. 7, no. 10, Oct. 1958

MARIN, R. A rational organization of the process of production brings up the increase of labor productivity as well as the rentability of enterprises.
p. 383

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, P.; POTAPOV, I.

Automation and increase in labor productivity in the oil industry.
Sots.trud 4 no.5:69-71 My '59. (MIRA 12:8)
(Petroleum industry--Labor productivity)
(Automation)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, N.V. (Novosibirsk); BESHKETO, V.K., kand.tekhn.nauk (Novosibirsk); FLEYSHMAN, B.A., dotsent (Novosibirsk)

Important features of the preparation for mass transportation of grain. Zhel.dor.transp. 44 no.6:33-37 Je '62. (MIRA 15:8)

1. Glavnyy inzh. gruzovoy sluzhby Zapadno-Sibirskoy dorogi (for Marin). 2. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta (for Fleyshman).
(Siberia--Grain--Transportation) (Railroads--Freight)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 39009-66

ACC NR: AP6029593 SOURCE CODE: RU/0022/66/011/004/0190/0197

AUTHOR: Marin, Nicolae (Engineer)

ORG: Department of Land Improvement, Higher Council of Agriculture (Consiliul Superior al Agriculturii, Departamentul imbunatatirilor funciare)

TITLE: Aspects of the construction of deep foundations of the pump stations reclamation works - open caissons

SOURCE: Hidrotehnica, gospodarirea apelor, meteorologia, v. 11, no. 4, 1966, 190-197

TOPIC TAGS: civil engineering, construction

ABSTRACT: Based on the experience of several hydroreclamation sites, the author proposes several measures to improve operations of this type. Organizational measures and improved methods of manufacturing and of submerging and concreteing open caissons are discussed, as well as some safety measures specific to the techniques involved. Orig. art. has: 9 figures. [Based on author's Eng. abst.]

SUB CODE: 13 / SUBM DATE: --Oct65 / ORIG REF: 003 / OTH REF: 001

Card 1/1 UDC: 624.157.2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

To integrate the above equation, all coefficients are assumed constant and the distribution of particles on the earth's surface is expressed by

$$q^* = \int_0^\infty K_z \frac{\partial q}{\partial z}\Big|_{z=0} dt.$$

The solution is given in terms of Whitaker and Gamma functions and is expanded in Taylor series around the point t = T (T = h/V). This leads to an expression of the form

$$q^* \simeq H\Gamma(2) A^{-2} \exp\left[-d - \frac{a}{b} - bT\right] \int_0^\infty \exp\left[-\frac{Bh^3}{4K_z T^2}(t-T)^2\right] dt -$$

$$-H \int_T^\infty \exp(-C) \int_0^{t-T} F_1(t, \xi)\, d\xi\, dt.$$

The equation is then used to calculate K_x and K_z (mixing length coefficients) in terms of experimentally determined values of q^*. Several special examples are considered. The authors express their acknowledgements to A. Ya. Pressman for his remarks. This paper was presented by Adademician Ye. K. Fedorov on 9 June 1965. Orig. art. has: 11 equations.

SUB CODE: 04, 20/ SUBM DATE: 20May64/ ORIG REF: 001

Card 2/2 gd

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 07989-67 EWT(1) GW

ACC NR: AP6009417 SOURCE CODE: UR/0020/66/166/006/1315/1318

AUTHORS: Potrova, G. M.; Mar'in, N. P.; Berlyand, O. S.

ORG: none

TITLE: Precipitation of a cloud of interacting particles and the formation of "dust" sources as a result of atmospheric diffusion

SOURCE: AN SSSR. Doklady, v. 166, no. 6, 1966, 1315-1318

TOPIC TAGS: atmospheric diffusion, atmospheric cloud, atmospheric precipitation, turbulent flow

ABSTRACT: The concentration distribution of particles in the atmosphere, interacting with precipitating clouds, is calculated analytically. Particles which form dust sources and are distinct from the clouds are described by the source term $Q = Q_0 f(t)\delta(x)\delta(y)\delta[z - h(1 - t/T)] \times U(1 - t/T)]$.

To determine the particle concentration q, the following equation of turbulent mixing is solved: $\partial q/\partial t = K_x \partial^2 q/\partial x^2 + K_y \partial^2 q/\partial y^2 + K_z \partial^2 q/\partial z^2 - u\,\partial q/\partial x + w\,\partial q/\partial z + Q.$

Card 1/2 UDC: 532.516

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 17776-66

ACC NR: AP6006659

bination processes on the assumption that the liberated energy is expended on ionization. The equation for the number of particles absorbed in a unit of time per unit of volume in the spherical coordinate system (r, θ, ϕ) shows a maximum at a certain value of the coordinate r. At values of r below the maximum, the number of absorbed particles quickly approaches zero, while at values of r above the maximum the reduction in the number of particles is somewhat slower. The index of refraction for the ionized medium is calculated on the basis of the concentration of free electrons in the cloud. A method is proposed for finding the trajectory of rays in a medium with a given index of refraction. A practical formula is given for determining the dimensions of the ionized layer above the source of radio waves which is opaque to these waves. The equations derived in this paper may be used for approximating the trajectories of radio waves in an ionized medium where the index of refraction depends on two coordinates (r and θ). Orig. art. has: 1 figure and 13 formulas. [14]

SUB CODE: 17,04 SUBM DATE: 22Dec64/ ORIG REF: 003/ OTH REF: 001
ATD PRESS: 4208

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 17776-66 EWT(d)/EWT(l)/EEC(k)-2/FCC/EWA(h) RB/GW/WS-2

ACC NR: AP6006659 SOURCE CODE: UR/0203/66/006/001/0063/0067

AUTHOR: Mar'in, N. P.

ORG: none

TITLE: Propagation of radio waves in an artificially created ionized cloud in a nonhomogeneous atmosphere of the Earth

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 1, 1966, 63-67

TOPIC TAGS: radio wave propagation, ionized plasma, refractive index, ionospheric absorption

ABSTRACT: The author considers scattering of radio waves by an ionized cloud with dimensions on a scale with the reduced height of the standard atmosphere. The distribution of particles in the cloud is determined from the equation of turbulent diffusion for the nonhomogeneous atmosphere. The power evolved in a unit of volume as a result of absorption or decay of the diffusing particles is proportional to the number of absorbed particles. A formula is given for the concentration of free electrons formed during continuous action of the ionization source with regard to recom-

UDC: 550.388.2

Card 1/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 10353-66
ACC NR: AP5026896

are derived. Conditions are clarified which make possible radar detection of the track; a formula is offered which determines the beam direction at which the radar detection is possible. In addition, means for calculating the effective reflecting surface of the track, for a wide function of distribution of free-electron concentration, are given. Use of the above formulas is illustrated by an example of reflection of a planar wave from the ionized track in the plane $\xi_3 = 1$ (ξ_3 is the third coordinate in the parabolic system of coordinates). Orig. art. has: 1 figure and 80 formulas.

SUB CODE: 17 / SUBM DATE: 13Jun64 / ORIG REF: 005

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 10353-66 EWT(d)/EWT(l)/EEC(k)-2/T/EWA(m)-2 IJP(c) GG/WS-2

ACC NR: AP5026896 SOURCE CODE: UR/0109/65/010/010/1765/1773

AUTHOR: Mar'in, N. P.

ORG: none

TITLE: Scattering electromagnetic waves by an ionized paraboloid-shape track

SOURCE: Radiotekhnika i elektronika, v. 10, no. 10, 1965, 1765-1773

TOPIC TAGS: electromagnetic wave scattering, radar detection

ABSTRACT: Assuming that the electromagnetic-wave source is situated outside the ionization source and that the latter leaves a track describable by a paraboloid of rotation, an eikonal equation $(\nabla U)^2 = n^2$, where n^2 is the refraction factor of the ionized medium, is set up and solved; formulas for beam trajectories in the ionized track are developed. Also, formulas for evaluating the diminishing electromagnetic-energy flow due to energy absorption in the ionized-track plasma

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 39473-65
ACCESSION NR: AP5005340

for the above three cases of free-electron distribution. Radar applications of the problem are noted. Orig. art. has: 3 figures and 68 formulas.

ASSOCIATION: none

SUBMITTED: 06Jan64 ENCL: 00 SUB CODE: EC, ME

NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 39473-65 FBD/FSS-2/EWT(1)/EWG(v)/EEC-4/EEC(t)/EED-2 Pm-4/Pe-5/Pac-4/
Pae-2/P1-4/Pj-4/Pk-4/P1-4 GW/WS-4/WR

ACCESSION NR: AP5005340 S/0109/65/010/002/0235/0244

55
B

AUTHOR: Mar'in, N. P.

TITLE: Efficiency of the reflecting surface of an ionizing sphere-shaped region

SOURCE: Radiotekhnika i elektronika, v. 10, no. 2, 1965, 235-244

TOPIC TAGS: radio wave reflection

ABSTRACT: The problem of reflection of a plane radio wave from a plasma sphere whose dielectric constant is determined by one coordinate r is solved by a method of geometrical optics. The dissipation of energy in the space by the plasma sphere is investigated for these cases of variation of free-electron density in the space: (a) hyperbolic law, (b) parabolic law, and (c) exponential law; at this stage, the electromagnetic-energy loss in the plasma is neglected. The reflected field strength is plotted against the angle θ of the beam path. Formulas are also developed for electromagnetic-energy absorption by the ionized sphere

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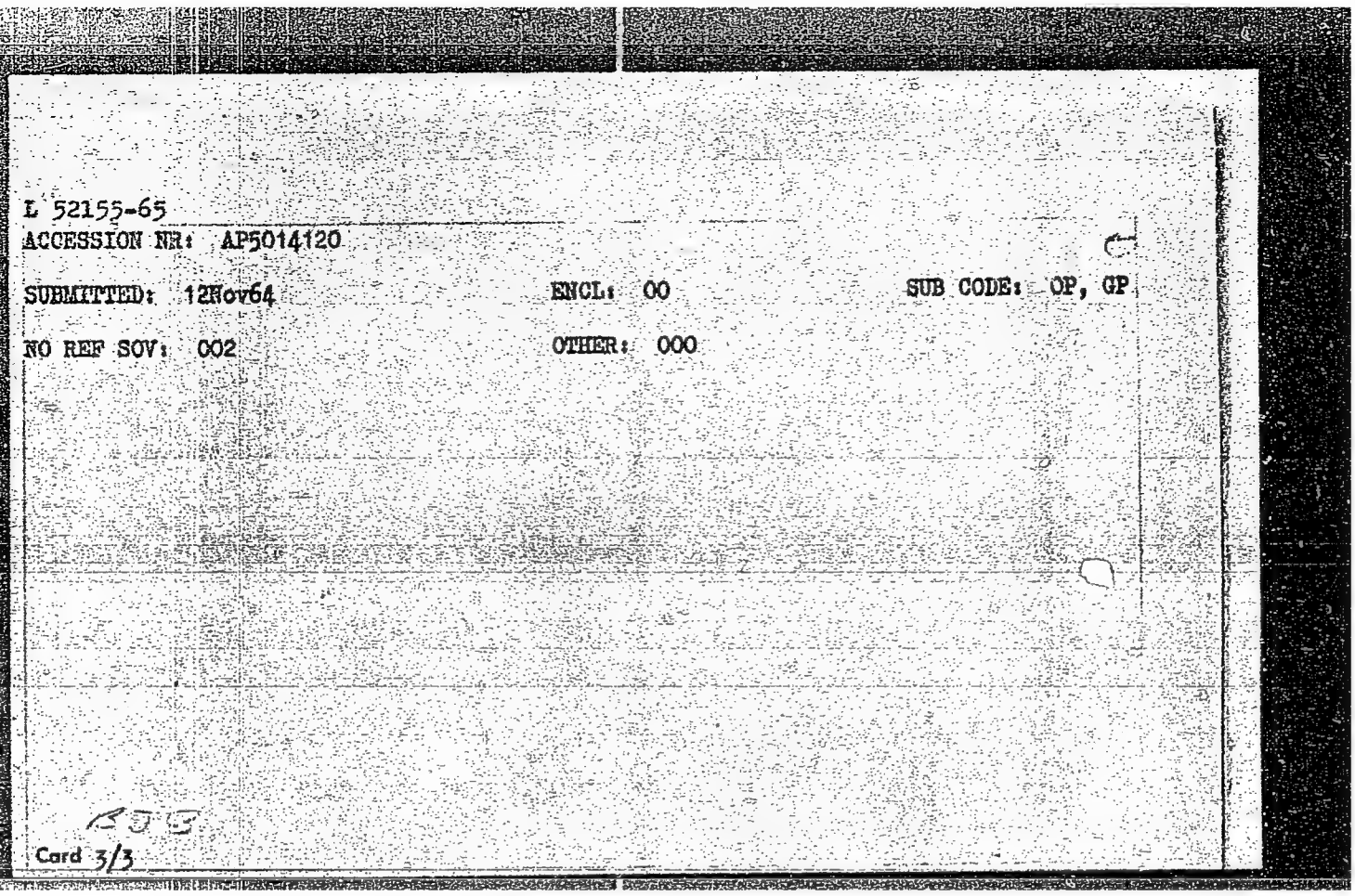

L 52155-65
ACCESSION NR: AP5014120

SUBMITTED: 12Nov64 ENCL: 00 SUB CODE: OP, GP

NO REF SOV: 002 OTHER: 000

Card 3/3

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L 52155-65
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$$T_{01} = \sqrt{\frac{a^2(1-\Pi_1)(\xi_1^2-1)-\xi_1^2(\xi_1^2-1)a_1^2-\xi_1^2a_1^2}{a^2(1-\Pi_1)(\xi_1^2-1)}},$$

$$T_{02} = \frac{a_1\xi_1}{a(1-\Pi_1)}, \quad T_{03} = \frac{a_3\xi_1}{a(1-\Pi_1)\sqrt{\xi_1^2-1}}.$$

The effective reflection surface is defined by

$$\sigma = \frac{4\pi}{\cos\alpha(T,n)\sqrt{g_4}},$$

which for the particular trajectory calculations can be expressed by

$$\sigma = \frac{\pi a^2}{\xi_{10}-1+\frac{\sqrt{\xi_{10}^2-1}}{\xi_{10}}\int_{\lambda_0}^{\lambda_1}\frac{\xi_1 d\lambda}{(1-\Pi_1)\sqrt{\xi_1^2-1}}}.$$

For $b^2 \to \infty$ it is shown that the reflection surface becomes equal to π times the principal radius of curvature of the surface. As a specific example, a solution is obtained for the plane $\xi_3 = \xi_{30} = 1$. Orig. art. has: 18 equations.

ASSOCIATION: none

Card 2/3

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L 52155-65 EEC-4/EPF(n)-2/EWG(v)/EPA(w)-2/EWA(h)/EWT(1)/EEC(t)/EWG(m)/FCC/Pe-5/Pi-4/Po-4/Pq-4/Pz-6/Pab-10/Pae-2/Peb IJP(c) AT/WW/GW

ACCESSION NR: AP5014120 UR/0203/65/005/003/0568/0573
550.388.2

AUTHOR: Mar'in, N. P.

TITLE: Electromagnetic wave trajectories of an ionized torcid and its effective surface reflection

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 3, 1965, 568-573

TOPIC TAGS: electromagnetic wave, wave trajectory, plasma, optics

ABSTRACT: The electromagnetic wave trajectories were calculated in a toroidal plasma, and the effective reflection surface of the ring determined by geometrical optics. The eikonal equation is given in toroidal coordinates

$$(\xi_1^2-1)\left(\frac{\partial L}{\partial \xi_1}\right)^2+(1-\xi_2^2)\left(\frac{\partial L}{\partial \xi_2}\right)^2+\left(\frac{1-\xi_2^2}{\xi_1^2-1}\right)\left(\frac{\partial L}{\partial \xi_3}\right)^2=a^2n^2(\xi_1-\xi_2)^{-2}.$$

To solve this equation by means of separation of variables, the following condition is introduced

$$a^2n^2(\xi_1-\xi_2)^{-2}=\Pi_1^*(\xi_1)+\Pi_2^*(\xi_2),$$

where

$$\Pi_2^*=0,\quad \Pi_1^*=\frac{a^2[1-\Pi_1(\xi_1)]}{\xi_1^2}.$$

Using the Jacobi theorem and introducing the vector T as the tangent to the trajectory, the following two trajectory equations are obtained

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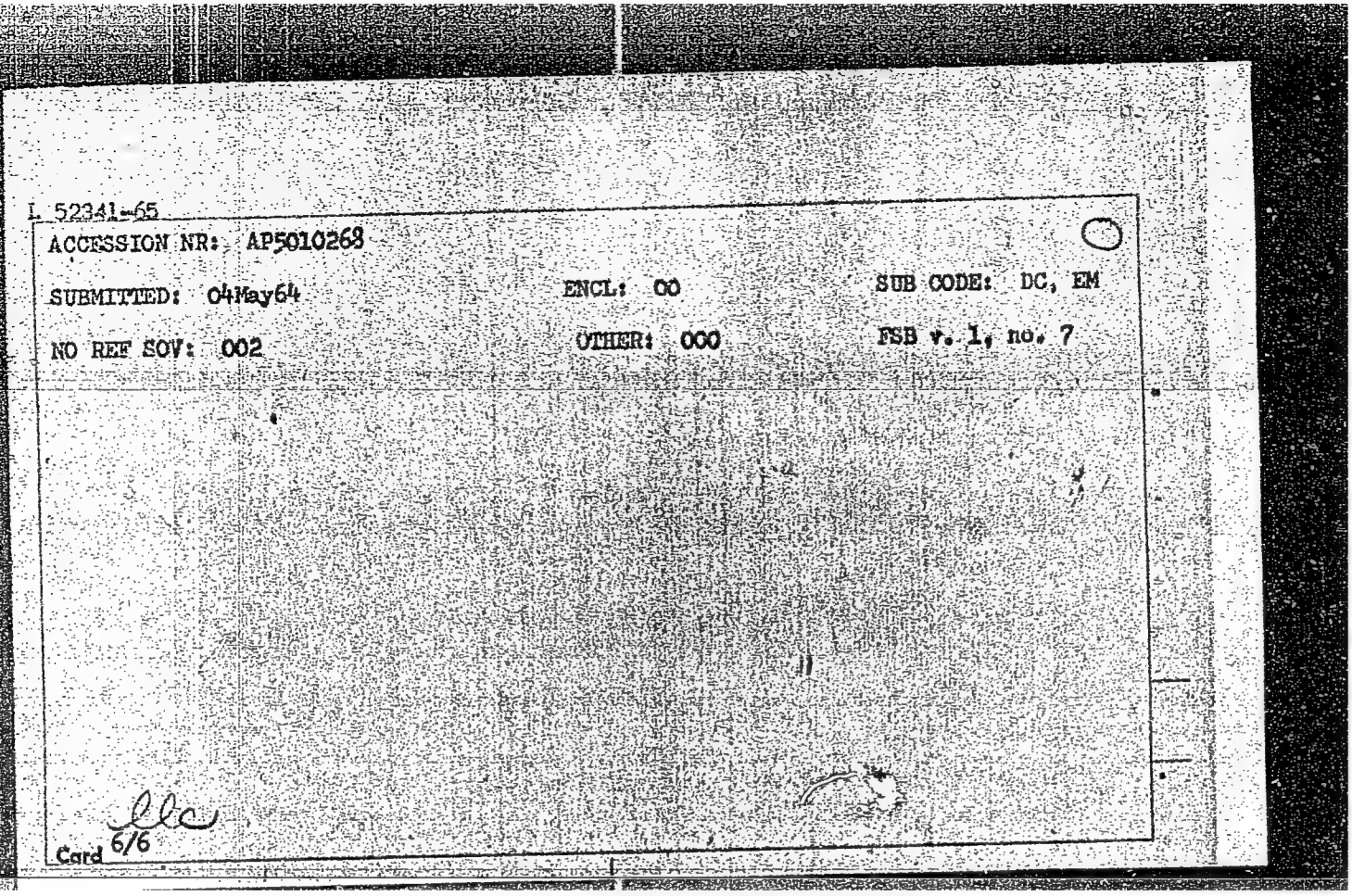

L 52341-65

ACCESSION NR: AP5010268

SUBMITTED: 04May64 ENCL: 00 SUB CODE: DC, EM

NO REF SOV: 002 OTHER: 000 FSB v. 1, no. 7

Card 6/6

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 52341-65
ACCESSION NR: AP5010268

trail. The propagation conditions of the diffused beams and their directions in relation to the incident beams are also determined.

The second part of the analysis is concerned with determining the density of the energy flux associated with the beam during its passage through the ionized trail, with the conditions simplified in that energy losses inside the trail are disregarded. An attempt is made to establish a valid formula for determining the density of the energy flux through any elementary area located on a sphere the center of which coincides with the origin of the coordinates associated with the trail as described above. A direct relationship is established for a given observation point with known coordinates for the dependence of the density of the energy flux upon the angle of incidence of the illuminating beam and the geometry of the trail. The results are illustrated by an analytical determination of the diagram of a plane wave re-radiated by the trail as applied to the radar signal illumination. Orig. art. has 1 figure and 40 formulas.

ASSOCIATION: none

Card 5/6

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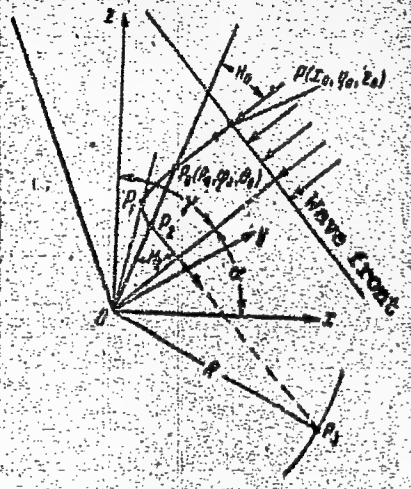
ACCESSION NR: AP5010268



the origin of the coordinate system are located in the XOZ plane; the analysis is then reduced to a consideration of point $P(x_0, y_0, z_0)$ in the plane of the wave front (the point of intersection between the orthogonal plane and the beam). Proceeding thus, one may readily determine the coordinates of the point of intersection between the beam and the trail boundary, at which the beam enters the inhomogeneous medium inside the trail. Trajectories of beams inside the trail and the factors which cause beam deflection are analyzed in great detail. The general formulas obtained are useful for analysis of conditions occurring at various angles of incidence of the beam with respect to the trail's axis. The results are applied in determining the angles of irradiation favorable for obtaining radar returns from an ionized

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The general form of the system of equations for the beam trajectories intersecting a given point $P_0(R_0, \varphi_0, \theta_0)$ is

$$\int_{R_0}^{R} \frac{dr}{r\sqrt{r^2 - a_1^2}} = \int_{\theta_0}^{\theta} \frac{\sin\theta\, d\theta}{\sqrt{[a_1^2 - b^2(\theta_0^2 - \theta^2)]\sin^2\theta - a_2^2}},$$

$$\varphi - \int_{\theta_0}^{\theta} \frac{a_2 d\theta}{\sin\theta\sqrt{[a_1^2 - b^2(\theta_0^2 - \theta^2)]\sin^2\theta - a_2^2}} = \tilde{\varphi}_0,$$

where a_1 and a_2 are constants determined by selecting such a coordinate system that both the trail's axis and the central beam which passes through

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z axis coinciding with the axis of the cone. Determination of the trajectories of the incident beams after they enter the cone is based on the assumption that electron concentration in the cone is described by

$$N(r, \varphi, \theta) = N_0 \frac{r_0^2}{r^2} \frac{\theta_0^2 - \theta^2}{\theta_0^2},$$

and that the relative dielectric constant of the ionized trail can be presented by

$$\varepsilon_r = 1 - \frac{4\pi e^2 N_0 (\theta_0^2 - \theta^2)}{m(\omega^2 + \nu^2) r^2} \frac{r_0^2}{\theta_0^2}.$$

The analysis is conducted within the accuracy limits of geometric optics, i.e., by assuming that the propagation of the beam of the electromagnetic waves in the ionized trail can be presented by a series of orthogonal equiphase planes. Mathematical analysis based on these assumptions is aimed at obtaining the system of equations for a series of beams. The constants of these equations can be selected to determine two arbitrary points intersected by a given beam or to determine the direction of a beam at a given point inside the trail.

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L 52341-65 EWT(d)/EWT(l)/EEC(k)-2/EEC-4/EEC(t)/EEC(b)-2/EWA(h) Pm-4/Pn-4/Po-4/Pq-4/
Pg-4/Pt-7/Peb/P1-4/P1-4 GG/LHB/WS-4

ACCESSION NR: AP5010268 UR/0203/65/005/002/0260/0268 74 B

AUTHOR: Mar'in, N. P.

TITLE: Diffusion of the beams of electromagnetic waves by a cone-shaped ionized trail 9

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 2, 1965, 260-268

TOPIC TAGS: electromagnetic wave generation, electromagnetic wave phenomenon, radar signal 21

ABSTRACT: This paper is concerned with investigations of propagation conditions for electromagnetic beams in a cone-shaped ionized trail formed in the atmosphere by a point ionization source. For purposes of analysis, the motion of the source is disregarded, i.e., a stationary state of the cone-shaped trail is assumed. The variation in the concentration of free electrons in the trail is assumed to be proportional to $(\theta_0^2 - \theta^2)$ (where θ_0 is a coordinate determining the trail's boundary) in its cross section and to r^{-2} along the axis of the cone. All equations are referred to a spherical coordinate system with its origin located at the top of the cone and the

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, N.P.

Diffusion of a cloud moving in a medium of variable density.
Inzh.-fiz. zhur. 7 no. 3:97-104 Mr '64. (MIRA 17:5)

1. Voyenno-vozdushnaya inzhenernaya akademiya im. prof. N. Ye. Zhukovskogo, Moskva.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, N.P. (Moskva)

Diffusion and absorption of particles in a medium of variable density. Prikl. mat. i mekh. 28 no.1:174-177 Ja-F'64.
(MIRA 17:2)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

ACCESSION NR: AP4019082

ASSOCIATION: Voyenno-vozdushnaya inzhenernaya akademiya im. prof. N. Ye. Zhukovskogo, Moscow (Air Force Engineering Academy)

SUBMITTED: 22Apr63 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: PH, AI NO REF SOV: 002 OTHER: 000

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

ACCESSION NR: AP4019082 S/0170/64/000/003/0097/0104

AUTHOR: Mar'in, N. P.

TITLE: Diffusion of a moving cloud in a medium of variable density

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 3, 1964, 97-104

TOPIC TAGS: cloud diffusion, atmospheric diffusion

ABSTRACT: A solution was found to the problem of diffusion of a cloud moving in a medium whose density varies in accordance with the exponential law. The solution of the diffusion equation is given in the form of an integral. The function of the instantaneous point-source effect is derived for the problem in question. Analysis of approximate expressions of the function shows that the points of the cloud in which the particle concentration is maximum penetrate in due course into the denser layers of the medium. The character of the variation of lines of equal particle concentrations with time is presented. Orig. art. has 26 formulas.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, N.P.

Properties of an artificial electron cloud created in a medium with variable density. Radiotekh. i elektron. 8 no.9:1587-1593 S '63. (MIRA 16:9)

(Electron gas) (Radio waves)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, N.P.

Diffusion of a gas absorbed in a medium of variable density.
Geomag. i aer. 3 no.4:647-656 Jl-Ag '63. (MIRA 16:11)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

The Joint of Two Different Planar Waveguides

23 x 10 mm. The author expresses his gratidude to Professor P. I. Kuznetsov. The paper contains 4 figures, 1 appendix and 5 Soviet references.

SUBMITTED: November 3, 1956 and after revision, April 4, 1958.

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The Joint of Two Different Planar Waveguides

transmitted fields can be expressed by Eq.(14). The amplitudes of the reflected and the transmitted transverse-magnetic fields are expressed by Eqs.(15) and (16) respectively. Eqs.(15) and (16) form a non-homogenecus infinite system of algebraic equations, from which it is possible to determine the amplitudes of the reflected and transmitted transverse-magnetic fields. Similarly, the amplitudes of the transverse-electric fields can be determined from Eqs.(13) and (14). By combining Eqs.(15) and (16) with Eqs.(6) and (8), a system of equations, expressed by formulae (17), is obtained; the coefficients b and a in these formulae are defined by Eqs.(18). Formulae (17) can be solved by the method of successive approximations. The above analytical results are employed to investigate the joint of a rectangular waveguide and a "radial" waveguide, which is shown in Fig.3b. It is shown that in this case the amplitudes of the reflected waves are expressed by Eqs.(20). The results of this calculation are given in Fig.4, which shows the value of the reflection coefficient as a function of the aperture angle of the "radial" waveguide; the crosses in Fig.4 denote the experimental points which were determined at a wavelength of 3.2 cm in a rectangular waveguide having a cross-section of

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The Joint of Two Different Planar Waveguides

the amplitudes of the waves in both the waveguides; the sign + by these coefficients signifies that the wave propagates in the positive direction of ξ_1 and ξ_2 while the sign - denotes the propagation in the opposite direction; the coefficients β are the separation constants, while m , n , s and i are positive integers from 0 to ∞. The amplitudes of the fields can be determined by employing the Lorentz lemma, which for the shaded volume of Fig.1 or 2 can be written in the form of Eq.(9); $\vec{H}$ and $\vec{E}$ denote the fields in the waveguide, $\vec{N}$ is an external normal to the surface S while h and e denote an auxiliary field. The choice of the auxiliary field depends on the amplitude to be determined. Thus, when determining the amplitudes $A_m^{\pm}$ of the transverse-electric reflected waves, Eq.(9) can be written as Eq.(11). If Eqs.(2) and (1) are substituted into Eq.(11), the latter is in the form of Eq.(12), from which the amplitude is expressed by Eq.(13). Similarly, the amplitudes $B_s^{\pm}$ of the transverse electric

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The Joint of Two Different Planar Waveguides

$$E_\xi^h = -\frac{i\omega\mu}{h_\eta}\frac{\partial \Pi^h}{\partial \eta}\,, \qquad H_\xi^h = -\frac{1}{h_\xi}\frac{\partial^2 \Pi^h}{\partial \xi \partial z}\,,$$

$$E_\eta^h = \frac{i\omega\mu}{h_\xi}\frac{\partial \Pi^h}{\partial \xi}\,, \qquad H_\eta^h = \frac{1}{h_\eta}\frac{\partial^2 \Pi^h}{\partial \eta \partial z}\,, \qquad (2)$$

$$E_z^h = 0\,, \qquad H_z^h = \frac{\partial^2 \Pi^h}{\partial z^2} + k^2 \Pi^h\,,$$

where Π^e and Π^h are potential functions which satisfy the wave equation and the boundary condition $E_t = 0$ at the walls of the waveguide. The boundary conditions can be written as Eqs.(3) for the transverse electric waves and as Eqs.(4) for the transverse magnetic waves where h are the Lame coefficients. If it is assumed that the coordinate system permits the separation of variables, the potential functions can be written (5) and (6) for the left hand side waveguide, and as the right hand side waveguide (6), (7) and (8) represent

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The Joint of Two Different Planar Waveguides

$$E_\xi^e = \frac{1}{h_\xi} \frac{\partial^2 \Pi^e}{\partial \xi \partial z} \quad , \qquad H_\xi^e = - \frac{i\varepsilon\omega}{h_\eta} \frac{\partial \Pi^e}{\partial \eta} \quad ,$$

$$E_\eta^e = \frac{1}{h_\eta} \frac{\partial^2 \Pi^e}{\partial \eta \partial z} \quad , \qquad H_\eta^e = \frac{i\varepsilon\omega}{h_\xi} \frac{\partial \Pi^e}{\partial \xi} \quad , \qquad (1)$$

$$E_z^e = - \frac{\partial^2 \Pi^e}{\partial z^2} + k^2 \Pi^e \quad ; \qquad H_z^e = 0 \quad ;$$

and (t) for transverse magnetic waves:

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

SOV/109-4-1-1/30

AUTHOR: Martin, N. P.

TITLE: The Joint of Two Different Planar Waveguides (O styke dvukh ploskikh raznorodnykh volnovodov)

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 1, pp 3-11 (USSR)

ABSTRACT: It is assumed that the joint is formed by the contact of two semi-infinite waveguides, each of which is described by a curvilinear orthogonal coordinate system, ξ_1, η_1, z and ξ_2, η_2, z, respectively. This type of joint is shown in Fig.1 or Fig.2; some special cases of the most common joints are shown in Fig.3. Since in a waveguide of constant cross-section, the solution of the Maxwell equations can be represented in the form of transverse electric and transverse magnetic waves, the projections of the electric and magnetic fields on to the coordinate axes can be described by (a) for transverse electric waves:

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L 23128-66
ACC NR: AP6001568

17

A pulse ion current of 21 ma was obtained under the following conditions: accelerating voltage, 270 kv; repetition frequency, 1000 cps; h-f generator consumption, about 100 w; extracting-pulse amplitude, 11—13 kv; extraction delay, 6 μsec; discharge-pulse time, 8 μsec; extraction-pulse time, 1.4 μsec; target-current time, 1 μsec. "M. V. Sokolov took part in development and alignment; L. A. Kiseleva, L. I. Pashchenko, G. I. Abakumov, N. I. Ushakova, Ye. M. Avilova, Yu. P. Basov, and N. V. Volkov took part in designing. The authors wish to thank B. S. Novikovskiy and V. A. Romanov for their advice; and V. I. Maroke, I. S. Belomyttsev, M. V. Krivenkov, A. I. Malygin, Ye. F. Semenov, V. I. Burlaka, and L. A. Shimkevich for their help in alignment." Orig. art. has: 5 figures.

SUB CODE: 18 / SUBM DATE: 02Nov64 / ORIG REF: 002 / OTH REF: 001

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 23128-66 EWT(m) DIAAP
ACC NR: AP6001568 (A) SOURCE CODE: UR/0120/65/000/006/0051/0057

AUTHOR: Serbinov, A. N.; Yakushev, V. P.; Rezvykh, K. A.; Marin, N. I.; Povsten', V. A.; Lutikov, V. K.; Doktorova, T. V.

ORG: Institute of Physics and Power Engineering, GKAE, Obninsk (Fiziko-energeticheskiy institut GKAE)

85
68
B

TITLE: Pulsed neutron generator

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1965, 51-57

TOPIC TAGS: neutron generator, pulsed neutron generator, pulse generator, deuteron, ion source, neutron

ABSTRACT: A new pulsed neutron generator constructed for physical studies is described in detail. Deuteron pulses are generated by a h-f type ion source which has a honeycomb extraction system. Both the source and its power supply are placed under an accelerating potential of 300 kv. Vacuum in the accelerating tube, 5×10^{-6} to 2×10^{-5} torr; for an average ion current of 14 ma at the target, the h-v source load current was 250 ma; repetition frequency, 3—1000 cps; neutron yield intensity, 10^{12} neutrons/sec in dT reaction; the highest observed target temperature, 100C.

Card 1/2 UDC: 621.039.555:539.125.5

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 11239-66

ACC NR: AP5024912

O

The rectifiers usually used as power supply for these pumps (type ND 10000/5000 and ANG 5000/2500) require an exorbitantly large floor space; this led to the development of a compact unipolar generator of 11 kw d.c. power (15,000 amperes, .7 volt), with liquid metal (mercury) brushes. A description and a schematic drawing of the generator is given. In tests, the generator achieved an efficiency of 76%. For smaller liquid metal flows, of several cubic centimeters per second, - helical channel conductional pumps are quite appropriate. They have been designed to deliver e.g. 2 cm^3/sec. of liquid metal at 800°K, using a current of only 100 - 200 amperes. Therefore, their power requirements can be supplied by small compact rectifiers. The simplicity and reliability of these pumps recommend them for use e.g. in laboratories. Orig. art. has 7 figures.

SUB CODE: 13, 09/ SUBM DATE: 26Jan65/

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L 11239-66 EWT(d)/EWT(l)/EWT(m)/EWP(w)/EPF(n)-2/EWP(v)/T-2/EWP(t)/EWP(k)/EWP(b)/
ACC NR: AP5024912 EWA(h)/EEC(m)-6 JD/WW/JG/EM UR/0382/65/000/003/0121/0126

AUTHOR: Avilova, E.M.; Doktorova, T.Y.; Lutikov, V.K.; Marin, N.I.; Povsten', V.A.; Turchin, N.M.

ORG: None

TITLE: Design features and test results of conductional pumps

SOURCE: Magnitnaya gidrodinamika, no. 3, 1965, 121-126

TOPIC TAGS: magnetohydrodynamic pump, electromagnetic pump design, unipolar generator

ABSTRACT: Design features of several conductional (direct current electromagnetic induction) pumps developed by the authors are described. Results of tests and comments on actual use are also given. A unipolar direct current generator developed as a better power source for one of the pump types is also described. The larger electromagnetic induction pump operating on the principle of DC current conductance in a perpendicular steady magnetic field was designed to pump liquid metals, such as Na and the NaK alloy at temperatures of 850 - 1050°K. It delivers a metal flow of 7,000 cubic centimeters per second. The pump requires 10000 amperes at .6 volt, and has a winding of two turns of an (80x80)mm^2 cross-section. Details of the working section, pressure dependence upon flow at various current magnitudes, and the efficiency variation data are given. A maximum efficiency of 36% was attained at 6000 amperes and 6000 cm^3/sec.

Card 1/2 UDC 538.4:621.689

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, N. I.

PA 28T12

USSR/Aeronautics Apr 1947
Airplanes - Loading
Aircraft - Construction

"Durability of Air Frames under Repeated Static Loading," N. I. Marin, 10 pp

"Tekh Voz Flota" No 5 (230)

Air frames are usually tested for durability under static loading and sturdiness under dynamic loading. The author presents mathematical formulas and graphs in connection with the question of repeated static loading of air frames under operational conditions. Several diagrams show actual tests being made on tubular parts.

BS 28T12

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, N. I., GROSSMAN, Ye. V., and KELDYSH, M. V.

Vibrations in Aircraft, BNT, 1942.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, N. I.

Prochnost' konstruktivnogo elementa pri povtornoi staticheskoi nagrucke. (Tekhnika vozdushnogo flota, 1947, no. 5, p. 1-10, illus., tables, diagrs.)

Title tr.: Strength of the structural element under repeated static load.

TL 504. T. 1947

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, N. I.

Klassifikatsiia mekhanicheskikh svoistv tverdogo tela i ikh chislennoe opredelenie. Moskva, 1932, 9 p., diagrs. (TSAGI. Trudy, no. 139)

Summary in English.

Title tr.: Classification of the mechanical properties of rigid bodies and their numerical determination.

QA911. M65 no. 139

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

AVILOVA, Ye.M.; DOKTOROVA, T.V.; LUTIKOV, V.K.; MARIN, N.I.; POVSTEN', V.A.; TURCHIN, N.M.

Construction features and test results of conduction pumps. Mag. gidr. no.3:121-126 '65. (MIRA 18:10)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

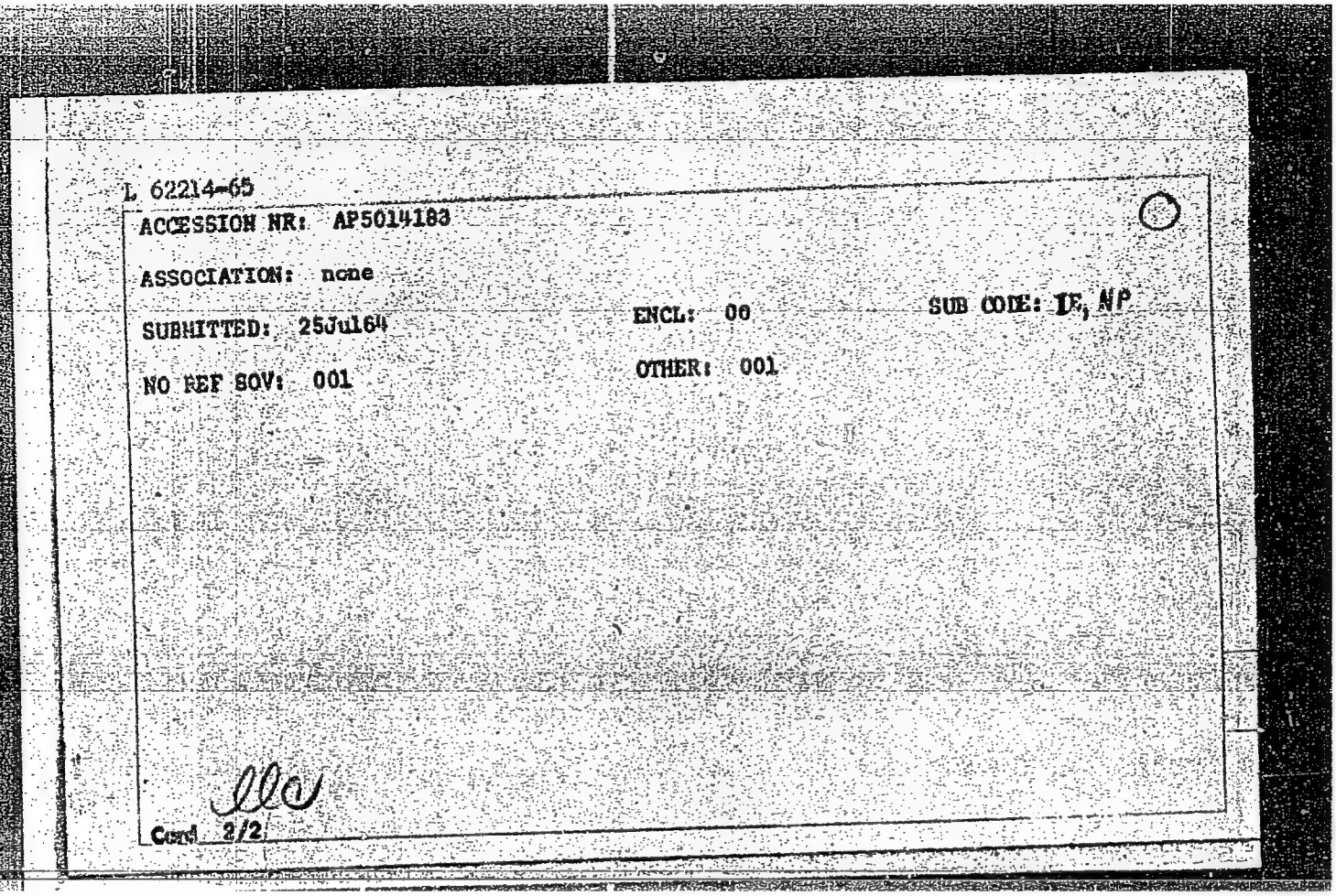
"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, N.I.; POVSTEN', V.A.; DOKTOROVA, T.V.; AVILOVA, Ye.M.

Electromagnetic pumps for alkali metals. Atom. energ. 18 no.3: 239-242 Mr '65. (MIRA 18:3)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0



L 62214-65

ACCESSION NR: AP5014183

ASSOCIATION: none

SUBMITTED: 25Jul64 ENCL: 00 SUB CODE: IE, NP

NO REF SOV: 001 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 6214-65 EWT(1)/EWP(m)/EPA(s)-2/EWT(m)/EPA(sp)-2/EPF(n)-2/EWG(v)/EPR/EPA(w)-2/
I-2/EWP(t)/EWP(b)/EWA(m)-2 Pd-1/Pe-5/Ps-4/Pt-7/Peb/Pi-4/Pu-4 DIAAP/IJP(c) JD/WH/JG

ACCESSION NR: AP5014183 UR/0382/65/000/001/0110/0114
538.4 : 621.313.333

78
B

AUTHOR: Avilova, Ye. M.; Doktorova, T. V.; Marin, N. I.; Povsten', V. A.; Turchin, N. M.

TITLE: Development and exploitation of helical induction pumps

SOURCE: Magnitnaya gidrodinamika, no. 1, 1965, 110-114

TOPIC TAGS: liquid metal pump, magnetohydrodynamics, radioactive material

ABSTRACT: The development and operation of helical induction pumps with large pumping rates (from 0.4 to 150 m^3/hr) is reported. The sustained operation of the Na-K pumps (also operating with Na only) in the 550°K to 680°K temperature regime was tested for 20,000 hours. Advantages and disadvantages of helical pumps are discussed. Specific units, ENIV-6 and ENIV-3 are described in detail and ENIV-3 performance is presented graphically. The largest unit ENIV-6 has a diameter of 53.7 cm and its length is 131 cm. These devices are also capable of pumping radioactive metals. Orig. art. has: 4 figures, 1 table.

Card 1/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 39719-65

ACCESSION NR: AP5009113

The ENIV-3 has operated for 20,000 hr at an NaK alloy temperature of 530K. The ENIV-1 has operated for 500 hr at 525—575K (liquid K), 10 hr at 815K, and 1 hr at 900K. Work is under way on improvements of the construction characteristics of the pumps to raise the operating temperature to 825—875K and higher. Orig. art. has: 1 table and 4 figures. [PS]

ASSOCIATION: none

SUBMITTED: 06Mar64 ENCL: 00 SUB CODE: IC, EE

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3229

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

L 39719-65 EPF(c)/EPF(n)-2/EPR/EPA(s)-2/EWT(m)/EPA(bb)-2/EWG(m)/EWP(b)/EWP(t)
Pr-4/Ps-4/Pt-10/Pu-4 IJP(c) DM/WW/JD/JG

ACCESSION NR: AP5009113 S/0089/65/018/003/0239/0242

AUTHOR: Marin, N. I.; Povsten', V. A.; Doktorova, T. V.; Avilova, Ye. M.

TITLE: Electromagnetic pumps for alkali metals

SOURCE: Atomnaya energiya, v. 18, no. 3, 1965, 239-242

TOPIC TAGS: electromagnetic pump, alkali metal, heat transfer agent, alkali metal alloy, liquid metal

ABSTRACT: Design characteristics, operating principles, and test data are presented for a series of small-size laboratory screw-type electromagnetic vertical pumps operating from a 3-phase a-c power source and intended for pumping liquid metals and alloys (K, NaK) which are used as heat transfer agents. Parameters of the following pumps of the same design but different size are given: ENIV-1, -2, -3, -4, -5, and -6, having capacities of 0.4, 2, 10, 50, 85, and 150 m^3/hr; pressures of 4.7, 2.5, 6, 5, 4.5, and 6 X 10^{-5} n/m^2; and working temperatures of 725, 875, 675, 675, 675, and 775K, respectively. The first 5 pumps of this series are already in operation.

Card 1/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

AVILOVA, Ye.M.; DOKTOROVA, T.V.; MARIN, N.I.; POVSTEN', V.A.; TURCHIN, N.M.

Design and operation of helical induction pumps. Mag. gidr. no.1:110-114 '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

ZNAMENSKIY, V.V.; RYABINKIN, L.A.; PETROV, L.V.; VARTANOV, S.P.; GAGEL'GANTS, A.A.; KOTLYAREVSKIY, B.V.; LOZOVSKAYA, I.F.; LYAKHOVITSKIY, F.M.; MAR'IN, N.I.; OSTROVSKIY, V.D.; PARIYSKAYA, G.N.; RIKHTER, V.I.; RUBO, V.V.; SLUTSKOVSKIY, A.I.; TARUTS, G.M.; TURCHANENKO, N.M.; SHMIDT, N.G.; SHNEYERSON, M.B.; GURVICH, I.I., red.; BORUSHKO, T.I., red.izd-va; GUROVA, O.A., tekhn. red.

[Instructions for seismic prospecting]Instruktsiia po seismorazvedke. Moskva, Gosgeoltekhizdat, 1962. 95 p. (MIRA 15:12)

1. Russia (1923- U.S.S.R.)Ministerstvo geologii i okhrany nedr. (Seismic prospecting)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, N.D.; VAGNER, R.I.

Use of hemithiamine-induced sleep for bronchoscopy in patients with lung cancer. Vop. onk. 11 no.12:9-14 '65.

(MIRA 19:1)

1. Iz II khirurgicheskogo otdeleniya (zav. - chlen-korrespondent AMN SSSR prof. A.I. Rakov) Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauki RSFSR prof. A.I. Serebrov).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MAR'IN, N.D.

Separate bronchospirometry in lung cancer patients. Vop. onk. 10 no.2:14-24 '64. (MIRA 17:7)

1. Iz 2- go khirurgicheskogo otdeleniya (zav.-chlen-korrespondent AMN SSSR prof. A.I. Rakov) Instituta onkologii AMN SSSR (dir.-deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov). Adres avtora: Leningrad, P-129, 2-ya Berezovaya alleya, d.3, Institut onkologii AMN SSSR.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

CEAMIS, Mihail, ing.; MARIN, Nicolae, ing.

Potentiometric determination of basicity of chrome tanning solutions. Industria usoara 10 no.6, 228-230 My '63.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

PAUNESCU,C.,Conf.; ANTON,M.,dr.; POPESCU,P.,dr.; GHERASIM,I.,dr.; MARIN, N.; THEODORESCU,B.,prof.

Contributions to the problem of the association of subacute endocarditis with rheumatismal endocarditis. Med. intern.,Bucur. 11 no.12:1833-1840 '59.

(ENDOCARDITIS,SUBACUTE BACTERIAL,complications)
(RHEUMATIC HEART DISEASE, complications)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

[redacted]

[redacted]AITY, N.

Thermic treatment of the linings and segments of a steam locomotive slide valve.

[redacted]. 22 (REVISTA CAILOR FERATE) (Bucuresti, Rumania) Vol. 6, no. 1, Jan. 1[redacted]

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5, 1958

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

KISLITSYN, P.I. (Irkutsk); MAR'IN, M.V. (Irkutsk)

Use of humps in section stations. Zhel. dor. transp. [illegible]
20-23 Mr '65.

1. Nachal'nik sluzhby dvizheniya Vostochno-Sibirskoy dorogi (for Kislitsyn). 2. Nachal'nik tekhnicheskogo [illegible] Vostochno-Sibirskoy dorogi (for Mar'in).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, M.

Color in industry. Nauka i zhizn' 30 no.9:100-101, p3 of cover S '63. (MIRA 16:10)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Mircea, ing.

Color in industry. St si Teh Buc 14 no.12:24-26 D'62.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Mircea, ing.

Color in industry. St si Teh Buc 14 no.12:24-26 D'62.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, M., ing.

Phototesting photographic shutters. St si Teh Buc 14 no.9: 42-43, 44 S '62.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Mircea
SURNAME, Given Names

Country: Rumania

Academic Degrees: Engineer

Affiliation: -not given-

Source: Bucharest, Stiinta si Tehnica, No 8, Aug 1961, pp 42-43.

Data: "Defects of Color Slides."

GPO 981643

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, M.
SURNAME (in caps); Given Names

Country: Rumania

Academic Degrees: Engineer

Affiliation: -not given-

Source: Bucharest, Stiinta si Tehnica, No 6, Jun 1961, pp 45.

Data: "Automation in Photography."

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

/

[redacted]
Surname (in caps); Given Names

Country: Rumania

Academic Degrees: Engineer

Affiliation: -not given-

Source: Bucharest, Stiinta si Tehnica, No 5, 1961, pp [illegible].

Data: "The Automation of Photography."

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, Marin; PIRVU, Dumitru

We receive the Soviet People's messages with open arms. Constr Buc 14 no.649:1 16 Je '62.

1. Sef de dchipa de la Intreprinderea-santier de constructii litoral-Mamaia (for Pirvu).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

ROMANIA

HERMAN, Gh.; CIULEI, I.; MARIN, M.; DÔ-TÂT-LỐI; HADARAG, Elena; DUMITRIU-CAROL, Emilia; BALACI, P.

Bucharest, Farmacia, No 5, May 1963, pp 271-283

"Contributions to the Study of Gekko Gecko L. Extract."

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARI, I.

Technological training in the present stage of the development of machine industry in our country.

p. 69 (Metalur ia Si Construc tia De Masini. Vol. 7, no. 1, Apr. 1955. Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 7, February 1958

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

MARIN, L.G.

Contents and preparation of the thesis "Increasing labor productivity by the utilization of hidden potentialities of production." Trudy KTIPP no.18:117-124 '57. (MIRA 13:2)
(Russia--Economic policy) (Labor productivity)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

GAK, Dmitriy Vasil'yevich [Hak, D.V.]; MARIN, L.G. [Marin, L.H.]

[Food industry of the Ukraine, 1917-1957] Kharchova promyslovist' Ukrainy, 1917-1957. Avtory D.V.Hak, L.H.Marin. Kyiv, Derzh.vyd-vo tekhnichnoi lit-ry, 1957. 156 p. (MIRA 12:6)

(Ukraine--Food industry)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

RUMANIA / Farm Animals. Cattle. Q

Abs Jour : Ref Zhur - Biologiya, No 5, 1959, No. 21234

Author : Andrei, N.; Marin, L.; Popa, I.; Adochitei, C.
Inst : Not given
Title : Investigations of the Problem of Morphologic-Productive Properties in Cows of the Pinzgau Breed at the Cotusca State Farm

Orig Pub : Probl. zootehn. si veterin., 1958, No 4, 13-21

Abstract : The Pinzgau cattle at the Cotusca State Farm has a well proportioned and strong body build and possesses a lively disposition. The cows' average milk yield amounts to 3165 liters, the maximum being 6157 liters.

Card 1/1

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

ACCESSION NR: AP4019484

is slower and with higher ammonia concentration, the yield of SiO_2 drops rapidly. Time is also an important factor: with 0.826% ammonia, only 25% hydrolysis was achieved in 20 minutes, and 98% in 140 minutes. Ammonia concentration should therefore be no greater than 0.9%. The more rapid hydrolysis with the same concentration of HCl is explained by the fact that it is a stronger electrolyte than ammonia. The presence of hydroxyl ions, and hence the ammonia method, is considered preferable to the presence of hydrogen ions. Orig. art. has: 7 tables.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Metallurgical Institute);Dneprovskiy titano-magniyev*y zavod (Dneprovsk Titanium-Magnesium Plant)

SUBMITTED: 21Feb63 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: CH, MA NR REF SOV: 006 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

ACCESSION NR: AP4019484 S/0078/64/009/003/0530/0533

AUTHORS: Vekhov, V. A.; Dudnik, Ye. P.; Marin, K. G.

TITLE: Production of silicon dioxide by hydrolysis of tetraethoxysilane

SOURCE: Zhurnal neorg. khimii, v. 9, no. 3, 1964, 530-533

TOPIC TAGS: tetraethoxysilane, hydrolysis, silicon dioxide, production, hydrolysis catalyst, reaction rate, HCl catalyst, ammonia catalyst

ABSTRACT: The hydrolysis of tetraethoxysilane in aqueous solution in the presence of a catalyst that is easily separable from the product, and the reaction rates and yields of SiO_2 were investigated. On hydrolyzing with a 1% HCl solution, a 1:1 tetraethoxysilane:water ratio is optimum. Increasing HCl concentration from 0.0097 to 3.65% increases the time required to complete hydrolysis. A satisfactory white SiO_2 was obtained with 0.186% HCl in 8 minutes; therefore 0.2% or stronger HCl is suggested. With ammonia, a 1:1 reactant ratio is also optimum. Reaction temperature is 30-40C to prevent excessive volatilization of the ammonia. With 0.94% ammonia, 98% hydrolysis was obtained in 55 minutes. With lesser concentrations the hydrolysis

Card 1/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0

VEKHOV, V.A.; DUDNIK, Ye.P.; MARIN, K.G.

Preparation of silicon dioxide by hydrolysis of tetraethoxysilane. Zhur. neorg. khim. 9 no.3:530-533 Mr '64.
(MIRA 17:3)

1. Dnepropetrovskiy metallurgicheskiy institut i Dneprovskiy titano-magniyevyy zavod.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001032310010-0"